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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/886,909	06/21/2001	Michael J. Kocin	20-0087	6653

2604 7590 08/23/2004

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EXAMINER

MANOSKEY, JOSEPH D

ART UNIT	PAPER NUMBER
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2113

DATE MAILED: 08/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/886,909	Applicant(s) KOCIN, MICHAEL J.	
	Examiner Joseph Manoskey	Art Unit 2113	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Amendment filed on 06 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3-8 is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 9 is/are rejected.
- 7) ☒ Claim(s) 10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

2. The term "substantially greater" in claim 9 is a relative term which renders the claim indefinite. The term "substantially greater" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably appraised of the scope of the invention. The term "length" and "depth" have thus been made indefinite by the use of the term "substantially greater".

3. The Examiner notes that the Applicant states in his remarks that the claim is not dependent on the term shallow or the like, now amended to the term "substantially greater", for patentability. The Examiner makes the suggestion that the limitation "having a length that is substantially greater than depth thereof" be removed if the Applicant still feels the patentability of the claim is not dependent on it.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hansel et al., U.S. Patent 4,694,194, hereinafter referred to as "Hansel" in view of Gregorich et al., U.S. Patent 5,289,046, hereinafter referred to as "Gregorich" and Breikss, U.S. Patent 4,122,359.

3. Referring to claim 1, Hansel teaches a power supply comprising an input from prime power and an output for supplying power (See Fig. 1). Hansel also discloses the power module comprising a first branch and a second branch for supplying a voltage (See Fig. 1). Hansel teaches the second branch including a battery and means for supplying a voltage from the battery (See Fig. 1). Hansel discloses a steering circuit that acts as an electronic switch that supply voltage from the first branch or from the second branch when it is not receiving sufficient power (See Fig. 1 and Col. 2, line 68 to Col. 3, line 8). Hansel also teaches a microcomputer, interpreted as a microcontroller, for controlling switching of the steering circuit (See Fig. 1 and 2, and Col. 6, line 1-12). Hansel discloses the first branch supplying power to the microcomputer (See Fig. 1 and 2). Hansel also teaches a charge device coupled to the first branch, Hansel teaches the

output filter being a series inductance and shunt capacitance filter that produces a constant voltage at its output, this is interpreted as providing an output for predetermined interval when the first circuit terminates and the output voltage declining in voltage level over the predetermined interval (See Fig. 1, and Col. 2, lines 59-65).

Hansel does not teach the power supply's second branch producing a voltage less than the voltage from the first branch and Hansel does not teach the second branch including a battery charger. Hansel also does not teach the second branch receiving a portion of the power admitted at the module input.

Breikss teaches a memory protection arrangement that has regulated power supply and a battery that produces a voltage less than that of the power supply (See Figure and Col. 3, lines 15-17).

Gregorich discloses a power supply that has a second branch that includes a rechargeable battery array and a charger for that battery array (See Fig. 1). The charger receives a portion of the power admitted at the module input.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the two different voltage levels of a regulated power supply of Breikss and the battery charger and rechargeable battery array of Gregorich with power supply with battery backup of Hansel. This would have been obvious to one of ordinary skill in the art at the time of the invention because the battery can supply maintenance energy for the memory when the power supply voltage decays below the battery voltage (See Breikss Col. 1, lines 40-43) and because the battery charger allows the battery to maintain its charge when not in use and prolongs its lifetime.

4. Referring to claim 2, Hansel, Breikss, and Gregorich teach all the limitations (See rejection of claim 1) including adjustable control means for the first and second branch circuits. Hansel teaches a pulse width modulator that is used to adjust the output voltage (See Fig. 1 and 2, and Col. 1, lines 64-67). Hansel also discloses means for monitoring voltage and current of the first and second branches (See Fig. 1 and 2). Hansel also teaches means for adjusting the adjustable means, control circuitry (See Fig. 1 and 2, and Col. 3, lines 17-19).

Allowable Subject Matter

5. Claims 3-8 are allowed.

6. Claim 10 is objected to as being dependent upon a rejected base claim, but would be allowable if the indefinite term in claim 9, discussed above, was amended to be definite or the limitation was removed.

Response to Arguments

7. Applicant's arguments, see page 6 of the amendment filed on 19 May 2004, with respect to the Drawings and Specification have been fully considered and are persuasive. The Objections of Drawings and Specification have been withdrawn.

8. Applicant's arguments filed 19 May 2004 concerning claims 1 and 2 have been fully considered but they are not persuasive. See above rejection with clarifications.

The Applicant contends that Hansel does not teach two branches since the second branch does not receive power from the same source. The Examiner disagrees, with the inclusion of Gregorich's charger, that draws power from the prime power source, the second branch does receive power from the same source as the first branch.

The Applicant also contends that the charger of Gregorich cannot be used with the battery of Hansel. The rejection has been clarified to include both the charger of and the rechargeable battery of Gregorich.

The Applicant contends that there is no reason to replace the two voltage levels of Hansel with the two voltages of different values of Breikss. The two voltages of Breikss allow maintenance energy, the second lower voltage, to the memory. This allows a power supply to be applied to only the memory, which is volatile, during power down for protection (See Breikss Col. 1, lines 25-48).

The Applicant contends that Hansel doesn't teach a charging device. The Examiner disagrees and has clarified the rejection to include both the capacitor and inductor, which hold a charge. The Examiner also notes charge storage device being connected to the second branch as being irrelevant to the rejection of the claim.

The Applicant introduces arguments to the purpose of the charge storage unit to supply power to the microcontroller. The Examiner states that these arguments refer to limitations that are not claimed in claim 1.

9. Applicant's arguments, see pages 12-15 of the amendment filed on 19 May 2004, with respect to claims 3-8 have been fully considered and are persuasive. The 35 U.S.C. 103(a) rejection of claims 3-8 has been withdrawn.

10. Applicant's arguments, see pages 15-18 of the amendment, filed on 19 May 2004, with respect to claims 9 and 10 have been fully considered and are persuasive. The 35 U.S.C. 103(a) rejection of claims 9 and 10 have been withdrawn.

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Manoskey whose telephone number is (703) 308-5466. The examiner can normally be reached on Mon.-Fri. (8am to 4:30pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on (703) 305-9713. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JDM
August 19, 2004


ROBERT BEAUSOLIEL
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